## **WHAT IS CLAIMED IS:**

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- 1. An isolated antibody that binds to a polypeptide having at least 80% amino acid sequence identity to:
  - (a) the polypeptide shown in any one of Figures 22-42 (SEQ ID NOS:22-42);
- (b) the polypeptide shown in any one of Figures 22-42 (SEQ ID NOS:22-42), lacking its associated signal peptide;
- (c) an extracellular domain of the polypeptide shown in any one of Figures 22-42 (SEQ ID NOS:22-42), with its associated signal peptide;
- (d) an extracellular domain of the polypeptide shown in any one of Figures 22-42 (SEQ ID NOS:22-42), lacking its associated signal peptide;
- (e) a polypeptide encoded by the nucleotide sequence shown in any one of Figures 1-21 (SEQ ID NOS:1-21); or
- (f) a polypeptide encoded by the full-length coding region of the nucleotide sequence shown in any one of Figures 1-21 (SEQ ID NOS:1-21).
  - 2. An isolated antibody that binds to a polypeptide having:
  - (a) the amino acid sequence shown in any one of Figures 22-42 (SEQ ID NOS:22-42);
- (b) the amino acid sequence shown in any one of Figures 22-42 (SEQ ID NOS:22-42), lacking its associated signal peptide sequence;
- (c) an amino acid sequence of an extracellular domain of the polypeptide shown in any one of Figures 22-42 (SEQ ID NOS:22-42), with its associated signal peptide sequence;
- (d) an amino acid sequence of an extracellular domain of the polypeptide shown in any one of Figures 22-42 (SEQ ID NOS:22-42), lacking its associated signal peptide sequence;
- (e) an amino acid sequence encoded by the nucleotide sequence shown in any one of Figures 1-21 (SEQ ID NOS:1-21); or
- (f) an amino acid sequence encoded by the full-length coding region of the nucleotide sequence shown in any one of Figures 1-21 (SEQ ID NOS:1-21).
  - 3. The antibody of Claim 2 which is a monoclonal antibody.
  - 4. The antibody of Claim 2 which is an antibody fragment.
    - 5. The antibody of Claim 2 which is a chimeric or a humanized antibody.
    - 6. The antibody of Claim 2 which is conjugated to a growth inhibitory agent.
  - 7. The antibody of Claim 2 which is conjugated to a cytotoxic agent.

- 8. The antibody of Claim 7, wherein the cytotoxic agent is selected from the group consisting of toxins, antibiotics, radioactive isotopes and nucleolytic enzymes.
  - 9. The antibody of Claim 7, wherein the cytotoxic agent is a toxin.
- 5 10. The antibody of Claim 9, wherein the toxin is selected from the group consisting of maytansinoid and calicheamicin.
  - 11. The antibody of Claim 9, wherein the toxin is a maytansinoid.
- 10 12. The antibody of Claim 2 which is produced in bacteria.

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- 13. The antibody of Claim 2 which is produced in CHO cells.
- 14. The antibody of Claim 2 which induces death of a cell to which it binds.
- 15. The antibody of Claim 2 which is detectably labeled.
- 16. An isolated nucleic acid having a nucleotide sequence that encodes the antibody of Claim 2.
- 20 17. An expression vector comprising the nucleic acid of Claim 16 operably linked to control sequences recognized by a host cell transformed with the vector.
  - 18. A host cell comprising the expression vector of Claim 17.
- 25 19. The host cell of Claim 18 which is a CHO cell, an E. coli cell or a yeast cell.
  - 20. A process for producing an antibody comprising culturing the host cell of Claim 18 under conditions suitable for expression of said antibody and recovering said antibody from the cell culture.